



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,524	04/27/2001	Stanley K. Honey	NTGR-10006US3	3729
28554	7590	06/29/2005	EXAMINER	
VIERRA MAGEN MARCUS HARMON & DENIRO LLP 685 MARKET STREET, SUITE 540 SAN FRANCISCO, CA 94105			HANNETT, JAMES M	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/844,524

Applicant(s)

HONEY ET AL.

Examiner

James M. Hannett

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-20, 37-39 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 37-39 and 41-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/27/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 4/7/2005 have been fully considered but they are not persuasive. The applicant argues that the prior art does not teach the method of determining field of view data using sensors that do not use image recognition.

The examiner points out that although DiCicco et al teaches that the preferred method of determining field of view data is performed using image pattern recognition, DiCicco teaches on Column 1, Lines 48-67 that it was common practice in the art at the time the invention was made to determined the field of view data using X and Y gyroscopic sensors. Although using the gyroscopic sensors makes the invention have increased jitter, one of ordinary skill in the art would have been motivated to produce the system without using image recognition in order to avoid paying the for the costly image recognition processing circuitry included in the camera of DiCicco et al.

Claim Objections

Claim 41 is objected to because of the following informalities: Lines 11 states, "is different that said first process" This is clearly an error and should be change to "is different than said first process". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1: Claims 37-39 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,892,554 DiCicco et al in view of USPN 5,264,933 Rosser et al.

2: As for Claim 37, DiCocco et al teaches in the abstract and on Column 6, Lines 15-67 and Column 2, Lines 28-35 a method for adding a graphic to a broadcast of a football game during a broadcast of the football game, comprising the steps of: storing an indication of a location of landmarks, determining the locations position in the video; and adding a static image or indicia to the video at the locations position in the video. DiCocco et al teaches on Column 8, lines 65-67 and Column 9, Lines 1-6 the step of adding includes adding the static image or indicia to one or more portions of the video that are not occluded and not adding the static image or indicia to one or more portions of the video that are occluded. DiCicco et al teaches a system in which an advertisement can be inserted onto the surface of a stadium. DiCicco et al teaches sensing field of view data. The field of view data is viewed by the examiner as the captured video by the video camera in the current image. The landmarks that are captured are in the current field of view of the video camera. DiCocco et al teaches on Column 2, Lines 27-35 that the current field of view is determined by using pattern recognition by comparing the location of landmarks in the current image to the location of landmarks in the reference image. However, DiCocco does not teach that the field of view data for the camera is based on one or more field of view sensors that do not use pattern recognition. DiCocco teaches on Column 1, Lines 48-67 that it was well known in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera.

Art Unit: 2612

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera in order to decrease cost by not including the complex pattern recognition circuitry that allows DiCocco to detect the landmarks. However, DiCocco et al does not teach that the step of modifying includes highlighting a portion of a playing field.

Rosser et al teaches a system that can insert indicia into a surface during a live event. Rosser et al teaches on Column 5, Lines 35-43 that it is advantageous to artificially mark the various field lines in a football game in order to enhance the appearance of a live event.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system of DiCocco et al to highlight the various field lines in a football game as taught by Rosser et al in order to enhance the appearance of a live event.

Rosser et al does not state that the yard line that indicates the first down can be highlighted. However, Official notice is taken that it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of DiCocco et al in view of Rosser et al to highlight the first down marker since Rosser et al teaches that it is advantageous to artificially mark the various field lines in a football game and it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game.

Art Unit: 2612

3: In regards to Claim 38, DiCocco et al teaches in the abstract and on Column 6, Lines 15-67 and Column 2, Lines 28-35 a method for adding a graphic to a video of a football game during a broadcast of the football game, comprising the steps of: storing an indication of a location of landmarks, determining the locations position in the video; and adding a static image or indicia to the video at the locations position in the video. DiCocco et al teaches on Column 8, lines 65-67 and Column 9, Lines 1-6 the step of adding includes adding the static image or indicia to one or more portions of the video that are not occluded and not adding the static image or indicia to one or more portions of the video that are occluded. DiCocco et al teaches a system in which an advertisement can be inserted onto the surface of a stadium. DiCocco et al teaches sensing field of view data. The field of view data is viewed by the examiner as the captured video by the video camera in the current image. The landmarks that are captured are in the current field of view of the video camera. DiCocco et al teaches on Column 2, Lines 27-35 that the current field of view is determined by using pattern recognition by comparing the location of landmarks in the current image to the location of landmarks in the reference image. However, DiCocco does not teach that the field of view data for the camera is based on one or more field of view sensors that do not use pattern recognition. DiCocco teaches on Column 1, Lines 48-67 that it was well know in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera in order to decrease cost by not including

Art Unit: 2612

the complex pattern recognition circuitry that allows DiCocco to detect the landmarks. However, DiCocco et al does not teach that the step of modifying includes highlighting a portion of a playing field.

Rosser et al teaches a system that can insert indicia into a surface during a live event. Rosser et al teaches on Column 5, Lines 35-43 that it is advantageous to artificially mark the various field lines in a football game in order to enhance the appearance of a live event.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system of DiCocco et al to highlight the various field lines in a football game as taught by Rosser et al in order to enhance the appearance of a live event.

Rosser et al does not state that the yard line that indicates the first down can be highlighted. However, Official notice is taken that it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of DiCocco et al in view of Rosser et al to highlight the first down marker since Rosser et al teaches that it is advantageous to artificially mark the various field lines in a football game and it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game.

4: As for Claim 39, DiCocco et al teaches in the abstract and on Column 6, Lines 15-67 and Column 2, Lines 28-35 a method for adding a graphic to a video of a football game during a broadcast of the football game, comprising: It is inherent that the system of DiCocco contain a storage device to store the reference image. DiCocco et al teaches on Column 2, Lines 27-30 a

Art Unit: 2612

processing unit in communication with the storage device, the storage device stores data for the processing unit, the processing unit is capable of performing a method comprising the steps of: storing an indication of a location of landmarks, determining the locations position in the video; and adding a static image or indicia to the video at the locations position in the video. DiCocco et al teaches on Column 8, lines 65-67 and Column 9, Lines 1-6 the step of adding includes adding the static image or indicia to one or more portions of the video that are not occluded and not adding the static image or indicia to one or more portions of the video that are occluded. DiCocco et al teaches a system in which an advertisement can be inserted onto the surface of a stadium. DiCocco et al teaches sensing field of view data. The field of view data is viewed by the examiner as the captured video by the video camera in the current image. The landmarks that are captured are in the current field of view of the video camera. DiCocco et al teaches on Column 2, Lines 27-35 that the current field of view is determined by using pattern recognition by comparing the location of landmarks in the current image to the location of landmarks in the reference image. However, DiCocco does not teach that the field of view data for the camera is based on one or more field of view sensors that do not use pattern recognition. DiCocco teaches on Column 1, Lines 48-67 that it was well know in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera in order to decrease cost by not including the complex pattern recognition circuitry that allows DiCocco to detect the landmarks. However,

Art Unit: 2612

DiCicco et al does not teach that the step of modifying includes highlighting a portion of a playing field.

Rosser et al teaches a system that can insert indicia into a surface during a live event. Rosser et al teaches on Column 5, Lines 35-43 that it is advantageous to artificially mark the various field lines in a football game in order to enhance the appearance of a live event.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system of DiCocco et al to highlight the various field lines in a football game as taught by Rosser et al in order to enhance the appearance of a live event.

Rosser et al does not state that the yard line that indicates the first down can be highlighted. However, Official notice is taken that it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of DiCocco et al in view of Rosser et al to highlight the first down marker since Rosser et al teaches that it is advantageous to artificially mark the various field lines in a football game and it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game.

5: As for Claim 41, DiCocco et al teaches in the abstract and on Column 6, Lines 15-67 and Column 2, Lines 28-35 a method for adding a graphic indication to a broadcast of a football game during a broadcast of a football game, comprising the steps of: storing an indication of a location on a football field; sensing field of view data for a camera; receiving video from the camera; determining the location's position in the video using a first step process that makes use

Art Unit: 2612

of the field of view data; performing a second step process to refine the positions location in the video, the second step process is different than the first step process. DiCocco et al teaches on Column 8, lines 65-67 and Column 9, Lines 1-6 the step of adding includes adding the static image or indicia to one or more portions of the video that are not occluded and not adding the static image or indicia to one or more portions of the video that are occluded. DiCocco et al teaches a system in which an advertisement can be inserted onto the surface of a stadium.

DiCocco et al teaches sensing field of view data. The field of view data is viewed by the examiner as the captured video by the video camera in the current image. The landmarks that are captured are in the current field of view of the video camera. DiCocco et al teaches on Column 2, Lines 27-35 that the current field of view is determined by using pattern recognition by comparing the location of landmarks in the current image to the location of landmarks in the reference image. However, DiCocco does not teach that the field of view data for the camera is based on one or more field of view sensors that do not use pattern recognition. DiCocco teaches on Column 1, Lines 48-67 that it was well know in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera in order to decrease cost by not including the complex pattern recognition circuitry that allows DiCocco to detect the landmarks. However, DiCocco et al does not teach that the step of modifying includes highlighting a portion of a playing field.

Art Unit: 2612

Rosser et al teaches a system that can insert indicia into a surface during a live event. Rosser et al teaches on Column 5, Lines 35-43 that it is advantageous to artificially mark the various field lines in a football game in order to enhance the appearance of a live event.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system of DiCocco et al to highlight the various field lines in a football game as taught by Rosser et al in order to enhance the appearance of a live event.

Rosser et al does not state that the yard line that indicates the first down can be highlighted. However, Official notice is taken that it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of DiCocco et al in view of Rosser et al to highlight the first down marker since Rosser et al teaches that it is advantageous to artificially mark the various field lines in a football game and it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game.

6: In regards to Claim 42, DiCocco et al teaches on Column 1, Lines 48-67 the use of both X and Y sensors. Therefore, the process of determining the location based on the first sensor is viewed as the data pertaining to the X sensor and the second process of refining is viewed as the process of determining the location based on the Y sensor data.

7: As for Claim 43, DiCocco et al teaches on Column 1, Lines 48-67 the use of both X and Y sensors. Therefore, the process of determining the location based on the first sensor is viewed

Art Unit: 2612

as the data pertaining to the X sensor and the second process of refining is viewed as the process of determining the location based on the Y sensor data.

Allowable Subject Matter

8: Claims 18-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach the method for enhancing the broadcast of a target at a live event by capturing a first frame of video which is viewed as the reference image using a first camera and capturing a second frame of video which is viewed as the video of the live event using a second camera. Furthermore, the prior art does not teach that the first and second cameras can be placed adjacent to each other to broadcast a live event.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

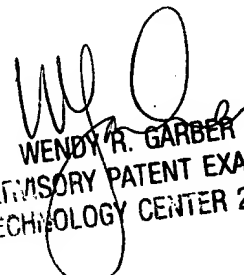
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hannett whose telephone number is 571-272-7309. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett
Examiner
Art Unit 2612

JMH
June 20, 2005


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600